

with the requirements for the development and approval of a forest plan. The Forest Supervisor shall review the conditions on the land covered by the plan at least every 5 years to determine whether conditions or demands of the public have change significantly.

(h) *Planning records.* The Forest Supervisor and interdisciplinary team shall develop and maintain planning records that document the decisions and activities that result from the process of developing a forest plan. Records that support analytical conclusions made and alternatives considered by the team and approved by the Forest Supervisor throughout the planning process shall be maintained. Such supporting records provide the basis for the development of the forest plan and associated documents required by NEPA procedures.

§ 219.11 Forest plan content.

The forest plan shall contain the following:

(a) A brief summary of the analysis of the management situation, including demand and supply conditions for resource commodities and services, production potentials, and use and development opportunities;

(b) Forest multiple-use goals and objectives that include a description of the desired future condition of the forest or grassland and an identification of the quantities of goods and services that are expected to be produced or provided during the RPA planning periods;

(c) Multiple-use prescriptions and associated standards and guidelines for each management area including proposed and probable management practices such as the planned timber sale program; and

(d) Monitoring and evaluation requirements that will provide a basis for a periodic determination and evaluation of the effects of management practices.

§ 219.12 Forest planning—process.

(a) *General requirements.* The preparation, revision, or significant amendment of a forest plan shall comply with the requirements established in this section. The planning process includes at least those actions set forth in paragraphs (b) through (k) of the section.

Some actions may occur simultaneously, and it may be necessary to repeat an action as additional information becomes available. The environmental impact statement for each forest plan shall be prepared according to NEPA procedures. To the extent feasible, a single process shall be used to meet planning and NEPA requirements.

(b) *Identification of purpose and need.* The interdisciplinary team shall identify and evaluate public issues, management concerns, and resource use and development opportunities, including those identified throughout the planning process during public participation activities and coordination with other Federal agencies, State and local governments, and Indian tribes. The Forest Supervisor shall determine the major public issues, management concerns, and resource use and development opportunities to be addressed in the planning process.

(c) *Planning criteria.* Criteria shall be prepared to guide the planning process. Criteria apply to collection and use of inventory data and information, analysis of the management situation, and the design, formulation, and evaluation of alternatives. Criteria designed to achieve the objective of maximizing net public benefits shall be included. Specific criteria may be derived from—

(1) Laws, Executive Orders, regulations, and agency policy as set forth in the Forest Service Manual;

(2) Goals and objectives in the RPA Program and regional guides;

(3) Recommendations and assumptions developed from public issues, management concerns, and resource use and development opportunities;

(4) The plans and programs of other Federal agencies, State and local governments, and Indian tribes;

(5) Ecological, technical, and economic factors; and

(6) The resource integration and management requirements in §§ 219.13 through 219.27.

(d) *Inventory data and information collection.* Each Forest Supervisor shall obtain and keep current inventory data appropriate for planning and managing the resources under his or her administrative jurisdiction. The Supervisor

will assure that the interdisciplinary team has access to the best available data. This may require that special inventories or studies be prepared. The interdisciplinary team shall collect, assemble, and use data, maps, graphic material, and explanatory aids, of a kind, character, and quality, and to the detail appropriate for the management decisions to be made. Data and information needs may vary as planning problems develop from identification of public issues, management concerns, and resource use and development opportunities. Data shall be stored for ready retrieval and comparison and periodically shall be evaluated for accuracy and effectiveness. The interdisciplinary team will use common data definitions and standards established by the Chief of the Forest Service to assure uniformity of information between all planning levels. As information is recorded, it shall be applied in any subsequent planning process. Information developed according to common data definitions and standards shall be used in the preparation of the 1990, and subsequent RPA Assessments and RPA Programs.

(e) *Analysis of the management situation.* The analysis of the management situation is a determination of the ability of the planning area covered by the forest plan to supply goods and services in response to society's demands. The primary purpose of this analysis is to provide a basis for formulating a broad range of reasonable alternatives. The analysis may examine the capability of the unit to supply outputs both with and without legal and other requirements. As a minimum, the analysis of the management situation shall include the following:

(1) Benchmark analyses to define the range within which alternatives can be constructed. Budgets shall not be a constraint. The following benchmark analyses shall be consistent with the minimum applicable management requirements of §219.27 and shall define at least—

(i) The minimum level of management which would be needed to maintain and protect the unit as part of the National Forest System together with associated costs and benefits;

(ii) The maximum physical and biological production potentials of significant individual goods and services together with associated costs and benefits;

(iii) Monetary benchmarks which estimate the maximum present net value of those resources having an established market value or an assigned value;

(A) For forest planning areas with major resource outputs that have an established market price, monetary benchmarks shall include an estimate of the mix of resource uses, combined with a schedule of outputs and costs, which will maximize the present net value of those major outputs that have an established market price;

(B) For all forest planning areas, monetary benchmarks shall include an estimate of the mix of resource uses, combined with a schedule of outputs and costs, which will maximize the present net value of those major outputs that have an established market price or are assigned a monetary value;

(C) For forest planning areas with a significant timber resource, estimates for paragraphs (e)(1)(iii) (A) and (B) of this section shall be developed both with and without meeting the requirements for compliance with a base sale schedule of timber harvest, as described in §219.16(a)(1), and with and without scheduling the harvest of even-aged stands generally at or beyond culmination of mean annual increment of growth, as described in §219.16(a)(2)(iii).

(D) Estimates for paragraphs (e)(1)(iii) (A) and (B) of this section shall be developed both with and without other constraints when needed to address major public issues, management concerns, or resource opportunities identified during the planning process.

(2) The current level of goods and services provided by the unit and the most likely amount of goods and services expected to be provided in the future if current management direction continues; this will be the same analysis as that required by §219.12(f)(5).

(3) Projections of demand using best available techniques, with both price and nonprice information. To the extent practical, demand will be assessed as price-quantity relationships.

Forest Service, USDA

§219.12

(4) A determination of the potential to resolve public issues and management concerns.

(5) Based on consideration of data and findings developed in paragraphs (e)(1)–(4), a determination of the need to establish or change management direction.

(f) *Formulation of alternatives.* The interdisciplinary team shall formulate a broad range of reasonable alternatives according to NEPA procedures. The primary goal in formulating alternatives, besides complying with NEPA procedures, is to provide an adequate basis for identifying the alternative that comes nearest to maximizing net public benefits, consistent with the resource integration and management requirements of §§219.13 through 219.27.

(1) Alternatives shall be distributed between the minimum resource potential and the maximum resource potential to reflect to the extent practicable the full range of major commodity and environmental resource uses and values that could be produced from the forest. Alternatives shall reflect a range of resource outputs and expenditure levels.

(2) Alternatives shall be formulated to facilitate analysis of opportunity costs and of resource use and environmental trade-offs among alternatives and between benchmarks and alternatives.

(3) Alternatives shall be formulated to facilitate evaluation of the effects on present net value, benefits, and costs of achieving various outputs and values that are not assigned monetary values, but that are provided at specified levels.

(4) Alternatives shall provide different ways to address and respond to the major public issues, management concerns, and resource opportunities identified during the planning process.

(5) Reasonable alternatives which may require a change in existing law or policy to implement shall be formulated if necessary to address a major public issue, management concern, or resource opportunity identified during the planning process (40 CFR 1501.7, 1502.14(c)).

(6) At least one alternative shall be developed which responds to and incorporates the RPA Program tentative re-

source objectives for each forest displayed in the regional guide.

(7) At least one alternative shall reflect the current level of goods and services provided by the unit and the most likely amount of goods and services expected to be provided in the future if current management direction continues. Pursuant to NEPA procedures, this alternative shall be deemed the “no action” alternative.

(8) Each alternative shall represent to the extent practicable the most cost efficient combination of management prescriptions examined that can meet the objectives established in the alternative.

(9) Each alternative shall state at least—

(i) The condition and uses that will result from long-term application of the alternative;

(ii) The goods and services to be produced, the timing and flow of these resource outputs together with associated costs and benefits;

(iii) Resource management standards and guidelines; and

(iv) The purposes of the management direction proposed.

(g) *Estimated effects of alternatives.* The physical, biological, economic, and social effects of implementing each alternative considered in detail shall be estimated and compared according to NEPA procedures. These effects include those described in NEPA procedures (40 CFR 1502.14 and 1502.16) and at least the following:

(1) The expected outputs for the planning periods, including appropriate marketable goods and services, as well as nonmarket items, such as recreation and wilderness use, wildlife and fish, protection and enhancement of soil, water, and air, and preservation of aesthetic and cultural resource values;

(2) The relationship of expected outputs to the RPA Program tentative resource objectives for the forest displayed in the current regional guide;

(3) Direct and indirect benefits and costs, analyzed in sufficient detail to estimate—

(i) the expected real-dollar costs (discounted when appropriate), including investment, administrative, and operating costs of the agency and all other public and private costs required to

manage the forest up to the point where the outputs are valued and the environmental consequences are realized;

(ii) the expected real-dollar value (discounted when appropriate) of all outputs attributable to each alternative to the extent that monetary values can be assigned to nonmarket goods and services, using quantitative and qualitative criteria when monetary values may not reasonably be assigned;

(iii) the economic effects of alternatives, including impacts on present net value, total receipts to the Federal Government, direct benefits to users that are not measured in receipts to the Federal Government, receipt shares to State and local governments, income, and employment in affected areas; and

(iv) the monetary opportunity costs (changes in present net value) associated with those management standards and resource outputs in each alternative that were not assigned monetary values but were provided at specified levels, compared with the maximum present net value benchmarks developed in §219.12(e)(1)(iii).

(4) The significant resource tradeoffs and opportunity costs associated with achieving alternative resource objectives.

(h) *Evaluation of alternatives:* Using planning criteria, the interdisciplinary team shall evaluate the significant physical, biological, economic, and social effects of each management alternative that is considered in detail. The evaluation shall include a comparative analysis of the aggregate effects of the management alternatives and shall compare present net value, social and economic impacts, outputs of goods and services, and overall protection and enhancement of environmental resources.

(i) *Preferred alternative recommendation.* The Forest Supervisor shall review the interdisciplinary team's evaluation and shall recommend to the Regional Forester a preferred alternative to be identified in the draft environmental impact statement and displayed as the proposed plan.

(j) *Plan approval.* The Regional Forester shall review the proposed plan and final environmental impact state-

ment and either approve or disapprove the plan in accordance with §219.10(c). The record of decision for approval of a plan shall include, in addition to the requirements of NEPA procedures (40 CFR 1505.2), a summarized comparison of the selected alternative with:

(1) Any other alternative considered which is environmentally preferable to the selected alternative; and

(2) Any other alternative considered which comes nearer to maximizing present net value.

(k) *Monitoring and evaluation.* At intervals established in the plan, implementation shall be evaluated on a sample basis to determine how well objectives have been met and how closely management standards and guidelines have been applied. Based upon this evaluation, the interdisciplinary team shall recommend to the Forest Supervisor such changes in management direction, revisions, or amendments to the forest plan as are deemed necessary. Monitoring requirements identified in the forest plan shall provide for—

(1) A quantitative estimate of performance comparing outputs and services with those projected by the forest plan;

(2) Documentation of the measured prescriptions and effects, including significant changes in productivity of the land; and

(3) Documentation of costs associated with carrying out the planned management prescriptions as compared with costs estimated in the forest plan.

(4) A description of the following monitoring activities:

(i) The actions, effects, or resources to be measured, and the frequency of measurements;

(ii) Expected precision and reliability of the monitoring process; and

(iii) The time when evaluation will be reported.

(5) A determination of compliance with the following standards:

(i) Lands are adequately restocked as specified in the forest plan;

(ii) Lands identified as not suited for timber production are examined at least every 10 years to determine if they have become suited; and that, if determined suited, such lands are returned to timber production;

Forest Service, USDA

§219.14

(iii) Maximum size limits for harvest areas are evaluated to determine whether such size limits should be continued; and

(iv) Destructive insects and disease organisms do not increase to potentially damaging levels following management activities.

§219.13 Forest planning—resource integration requirements.

The minimum requirements for integrating individual forest resource planning into the forest plan are established in §§219.14 through 219.26 of this subpart. For the purposes of meeting the requirements of §219.12(c), additional planning criteria may be found in the guidelines for managing specific resources set forth in the Forest Service Manual and Handbooks.

§219.14 Timber resource land suitability.

During the forest planning process, lands which are not suited for timber production shall be identified in accordance with the criteria in paragraphs (a) through (d) of this section.

(a) During the analysis of the management situation, data on all National Forest System lands within the planning area shall be reviewed, and those lands within any one of the categories described in paragraphs (a) (1) through (4) of this section shall be identified as not suited for timber production—

(1) The land is not forest land as defined in §219.3.

(2) Technology is not available to ensure timber production from the land without irreversible resource damage to soils productivity, or watershed conditions.

(3) There is not reasonable assurance that such lands can be adequately restocked as provided in §219.27(c)(3).

(4) The land has been withdrawn from timber production by an Act of Congress, the Secretary of Agriculture or the Chief of the Forest Service.

(b) Forest lands other than those that have been identified as not suited for timber production in paragraph (a) of this section shall be further reviewed and assessed prior to formulation of alternatives to determine the costs and benefits for a range of man-

agement intensities for timber production. For the purpose of analysis, the planning area shall be stratified into categories of land with similar management costs and returns. The stratification should consider appropriate factors that influence the costs and returns such as physical and biological conditions of the site and transportation requirements. This analysis shall identify the management intensity for timber production for each category of land which results in the largest excess of discounted benefits less discounted costs and shall compare the direct costs of growing and harvesting trees, including capital expenditures required for timber production, to the anticipated receipts to the government, in accordance with §219.12 and paragraphs (b)(1) through (b)(3) of this section.

(1) Direct benefits are expressed as expected gross receipts to the government. Such receipts shall be based upon expected stumpage prices and payments-in-kind from timber harvest considering future supply and demand situation for timber and upon timber production goals of the regional guide.

(2) Direct costs include the anticipated investments, maintenance, operating, management, and planning costs attributable to timber production activities, including mitigation measures necessitated by the impacts of timber production.

(3) In addition to long-term yield, the financial analysis must consider costs and returns of managing the existing timber inventory.

(c) During formulation and evaluation of each alternative as required in §219.12 (f) and (g), combinations of resource management prescriptions shall be defined to meet management objectives for the various multiple uses including outdoor recreation, timber, watershed, range, wildlife and fish, and wilderness. The formulation and evaluation of each alternative shall consider the costs and benefits of alternative management intensities for timber production as identified pursuant to paragraph (b) of this section in accordance with §219.12(f). Lands shall be tentatively identified as not appropriate for timber production to meet